

### REMARKS

This Amendment is responsive to the Office Action mailed on July 13, 2004. A Petition for Extension of Time is submitted herewith together with the required fee.

New claims 18-34 are now pending in the application. Claims 1-17 have been cancelled. A new Abstract is submitted herewith, as required by the Examiner.

Claims 1-17 were objected to in view of various informalities pointed out by the Examiner. Original claims 3, 13 and 14 were rejected as being indefinite. The new claims have been written to overcome the objections and the rejection under 35 U.S.C. 112 noted by the Examiner. Withdrawal of the objections and the section 112 rejection is therefore respectfully requested.

Claims 1, 2, 12, 13 and 15 were rejected as being anticipated by Genova et al. U.S. patent 6,534,937. Claims 1-7 and 15 were rejected as being obvious over Chapman U.S. patent 6,232,731 in view of Genova et al. Claims 8 and 9 were rejected as being obvious over Genova et al and Chapman in further view of Hardt U.S. patent 6,611,117. Claim 10 was rejected as being obvious over Genova et al. and Chapman in further view of Palara et al. EPO patent application 0373693. Claims 16 and 17 were rejected as being obvious over Genova et al. The subject matter of Claim 11 was indicated as being allowable.

Applicant's new claims 18-34 are believed to clearly patentably define over the prior art. In particular, independent claim 18 requires, *inter alia*, that the control circuit be adapted to control the first and second electronic switches with "one out of only three switching signal pairings." The signal pairings comprise: (i) the first switch being on and the second switch being off, (ii) the first switch being off and the second switch being on, and (iii) the first and second switches being off. The processor has a "signal output port" coupled to control the control circuit to select one of said three signal pairings, "via one of three possible output signals at said signal output port."

It is clear from Applicant's claim language that the processor provides the control circuit with one of three possible output signals. Moreover, the output signal is provided at the same

signal output port of the processor, regardless of which signal it is. This implementation simplifies the communication between the processor and the control circuit.

Still further, it is clear from the claim that since the three possible signal pairings are limited to either (a) one switch on and one switch off or (b) both switches off, there can never be a state where both switches are on. As indicated in Applicant's specification, last two paragraphs on page 16 and first paragraph on page 17, "at no time can a state occur in which both the first electronic switch 16 and the second electronic switch 20 are switched on - even if for only such a short time." This result of Applicant's claimed structure prevents a short circuit state of the half bridges, even if the processor were to fail.

The cited prior art fails to disclose or suggest a structure as claimed by Applicant. Although Figure 1 of Genova et al. discloses that logic 12 delivers signals to driver circuits 13, there is no indication that these signals can comprise one of only three different switching signal pairings. Applicant's claim 18 is clear that in accordance with the present invention, the control circuit is adapted to control the first and second electronic switches with one out of only three defined switching signal pairings, and that the processor has a signal output port coupled to control the control circuit to select one of the three signal pairings, via one of three possible output signals at the processor's signal output port. Similar patentable structure is found in independent claim 32. Accordingly, Applicant's claims are believed to clearly patentably distinguish over Genova et al. taken alone, or in combination with any of the other prior art references of record. There is nothing in Genova et al. that would preclude additional signal pairing states, or additional signals being output from the logic, which could result in a short circuit.

Further remarks regarding the asserted relationship between Applicant's claims and the prior art are not deemed necessary, in view of the foregoing amendments and discussion. Applicants' silence as to any of the Examiner's comments is not indicative of acquiescence to the grounds of rejection.

In view of the above, entry of the present amendment and reconsideration and allowance of each of the claims is respectfully requested. If there are any remaining issues that need to be addressed in order to place this application into condition for allowance, the Examiner is requested to telephone Applicants' undersigned attorney.

Respectfully submitted,

A handwritten signature in black ink, appearing to be "Barry R. Lipsitz", written over a horizontal line.

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